# Exhibit 9 – Measured Data Index

Motorola Customer Premise Equipment (CPE)

FCC ID: MIJTELCPE-USB-01

Telaxis Model No. XCV-31-UB1H-R2

## 9.0 Measured Data Index

#### 9.1 RF Output Measured Data

#### 9.1.1 Transmitter Output Power

The CPE Data transmitter has a normal output power range from -20dBm to +12dBm. At saturation, the output power is typically +24dBm. The CPE Data transmitter was operated at its saturation output level.

#### 9.1.2 Effective Isotropic Radiated Power (EIRP)

The calculated EIRP based on the saturated output power of the CPE is:

Power (sat.) = +24dBm = -6 dBWAntenna Gain = 35 dBi EIRP = -6 + 35 = 29 dBW

Based on a occupied bandwidth of 2.88 MHz, the EIRP referenced to a 1 MHz bandwidth is 24.4 dBW/MHz.

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### 9.2 Occupied Bandwidth Graphs

Figure 9.2-1 CPE Data Occupied Bandwidth Graph

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# 9.3 FCC Radiated Spurious Emissions Graphs

Emission	Received	Measure-	Cable	Antenna	Radiated	Limit Level	Comments	dB above the
Frequency	Power Level	ment	Loss *	Factor (dB)	Emission	(dBµV/m/		limit
(GHz)	(dBµV)	Bandwidth	(dB)		Level	4kHz BW)		
					(dBµV/m/			
					4kHz BW)			
31.2353	106.39	1 MHz	6	35.9	148.3	n/a	CPE Data Carrier -	
							Level not corrected to	
							4kHz BW	
31.2080	45.26	1 kHz	7	35.9	88.2	107.5	Spurious Emission -	Pass
							CW signal not	
							corrected to 1MHz	
							BW	
62.4706	20	3 kHz	1	43.3	66.8	111.3	2nd Harmonic - no	Pass
							emission detected;	
							receiver noise floor	
93.7059	25	3 kHz	1	46.8	75.3	111.3	3rd Harmonic - no	Pass
							emission detected;	
							receiver noise floor	

\* Cable loss above 40 GHz is for external mixer IF ( 221MHz) cable loss.

\*\* All other emissions greater than 20 dB below the specification were not reported

\*\*\* Spectrum search performed from 30 MHz to 100 GHz



Figure 9.3-1 CPE Data radiated spurious emissions

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### 9.4 Frequency Stability vs Temperature and Voltage

The CPE was tested for frequency stability over a temperature range of  $-30^{\circ}$  to  $+50^{\circ}$  C and an input supply voltage of  $\pm$  15% at its saturated output power (+24dBm). See Table 9.4-1 for actual test data and Figure 9.4-1 for a graphical presentation of the stability data for the CPE Data carrier.

f <sub>0</sub>	31.235220 GHz	Z	% E	FCC Limit	
°C	f @ -15% rated	f @ +15% rated	% Error @ -15%	% Error @ +15%	
	voltage in GHz	voltage in GHz	rated voltage	rated voltage	
-30	31.23522040	31.23522033	0.00000128%	0.00000106%	0.001%
-20	31.23522033	31.23522037	0.00000106%	0.00000118%	0.001%
-10	31.23522027	31.23522030	0.0000086%	0.0000096%	0.001%
0	31.23522040	31.23522033	0.00000128%	0.00000106%	0.001%
10	31.23522027	31.23522040	0.0000086%	0.00000128%	0.001%
20	31.23522027	31.23522030	0.0000086%	0.0000096%	0.001%
30	31.23522033	31.23522027	0.00000106%	0.0000086%	0.001%
40	31.23522033	31.23522033	0.00000106%	0.00000106%	0.001%
50	31.23522030	31.23522033	0.00000096%	0.00000106%	0.001%

 Table 9.4-1
 Frequency Stability Test Data – CPE Data



Figure 9.4-1 Frequency Stability Graph – CPE Data